

WHAT IS CLAIMED IS:

1. A method for preparing a biologically active composite material comprising:

- absorbing an infiltrant into at least one porous, biocompatible material; and

- maintaining the infiltrant and the porous material in contact under conditions effective to achieve at least partial coagulation of the infiltrant to form a self-supporting body.

2. The method of claim 1 wherein said porous, biocompatible material has a pore volume of at least about 30%.
3. The method of claim 1 wherein said porous, biocompatible material has a pore volume of at least about 70%.
4. The method of claim 1 wherein said porous, biocompatible material has a pore volume of at least about 85%.
5. The method of claim 1 wherein said porous, biocompatible material has a pore volume of at least about 88%.
6. The method of claim 5 wherein the porous, biocompatible material has a pore volume more of at least about 90%.
7. The method of claim 1 wherein the porous, biocompatible material comprises a synthetic bone mineral.
8. The method of claim 1 wherein the porous, biocompatible material comprises a ceramic material.
9. The method of claim 1 wherein the porous, biocompatible material comprises a

calcium phosphate material.

10. The method of claim 1 wherein the porous, biocompatible material comprises tri-calcium phosphate material.
11. The method of claim 10 wherein the tri-calcium phosphate material is beta-tri-calcium phosphate.
12. The method of claim 1 wherein the porous material is resorbable.
13. The method of claim 1 wherein the at least one porous, biocompatible material is comprised of a resorbable beta-tri-calcium phosphate with interconnected micro-, meso- and macro-pores that render said at least one porous, biocompatible material at least about 90% porous.
14. The method of claim 1 wherein said absorbing step comprises aspirating therapeutic material onto the porous material.
15. The method of claim 14 wherein said aspirating step comprises drawing bone marrow into a body of a syringe at least partially containing the porous material.
16. The method of claim 1 wherein the maintaining step takes place within a syringe, further comprises extruding self-supporting body.
17. The method of claim 1 further comprising manipulating the self-supporting body.
18. The method of claim 1 further comprising adding a healing composition to the self-supporting body or to the porous material.
19. The method of claim 18 wherein the healing composition is a medicament.

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20. The method of claim 1 wherein said infiltrant consists of bone marrow aspirate.
21. The method of claim 1 wherein said infiltrant comprises venous blood.
22. The method of claim 1 wherein said infiltrant comprises thrombin.
23. The method of claim 1 wherein said infiltrant comprises proteins, cells, growth factors or growth hormones that elicit bone formation or reparation.
24. A method for restoring an osseous void comprising placing in said void at least a portion of a self-supporting body comprising partially coagulated infiltrant in admixture with a porous, biocompatible material.
25. The method of claim 24 wherein said portion is shaped to fit said void.
26. The method of claim 24 wherein placement is effected using a syringe.
27. The method of claim 24 wherein placement is effected using a tube.
28. The method of claim 24 wherein placement is effected using an insertion guide.
29. The method of claim 24 wherein placement is effected using a catheter.
30. The method of claim 24 wherein placement is effected using a shaped mold.
31. The method of claim 24 wherein the infiltrant comprises bone marrow aspirate.
32. The method of claim 24 wherein the infiltrant comprises replicated bone marrow.
33. The method of claim 24 wherein said infiltrant comprises bone marrow aspirate, proteins, cells, a medicament, growth factors, or growth hormone or antibiotic that would elicit bone formation or reparation.

34. The method of claim 24 wherein the porous, biocompatible material comprises a synthetic bone mineral.
35. The method of claim 24 wherein the porous, biocompatible material comprises a ceramic material.
36. The method of claim 24 wherein the porous, biocompatible material comprises a calcium phosphate material.
37. The method of claim 24 wherein the porous, biocompatible material comprises tri-calcium phosphate material.
38. The method of claim 24 wherein the tri-calcium phosphate material is beta-tri-calcium phosphate.
39. The method of claim 24 wherein the porous, biocompatible material is resorbable.
40. The method of claim 24 wherein the infiltrant comprises venous blood.
41. The method of claim 24 wherein the infiltrant comprises thrombin.
42. The method of claim 24 wherein the porous, biocompatible material has a pore volume of at least about 30%
43. The method of claim 24 wherein the porous, biocompatible material has a pore volume of at least about 70%.
44. The method of claim 24 wherein the porous, biocompatible material has a pore volume of at least about 85%.
45. The method of claim 24 wherein said porous, biocompatible material has a pore volume of at least about 88%.
46. The method of claim 45 wherein the porous, biocompatible material has a pore volume

more of at least about 90%.

47. The method of claim 24 wherein the at least one porous, biocompatible material is comprised of a resorbable beta-tri-calcium phosphate with interconnected micro-, meso- and macro-pores that render said at least one porous, biocompatible material at least about 90% porous.
48. A method for restoring an intraosseous void comprising:
- preparing said void;
 - providing an aspirating means having porous material therein;
 - aspirating bone marrow from an animal using said aspirating means;
 - allowing BMA to mix with said porous material, thereby producing a composite of said aspirate and said porous material;
 - allowing said aspirate to at least partially coagulate;
 - removing the said composite from the aspirating means; and
 - placing at least a portion of said composite into said void.
49. The method of claim 48 wherein said composite is shaped to fit said void prior to insertion into said void.
50. The method of claim 48 wherein said aspirating means is a syringe.
51. The method of claim 50 wherein resultant composite is delivered into said void by syringe.
52. The method of claim 48 wherein the aspirate is allowed to coagulate for at least five minutes.
53. The method of claim 48 further comprising preserving any remaining resultant composite for later use.
54. The method of claim 48 wherein preservation is by freezing.

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55. The method of claim 48 wherein the porous material is comprised of a resorbable beta-tri-calcium phosphate with interconnected micro, meso and macro pores that render said porous biocompatible material at least about 90% porous.
56. A biologically active composite comprising a porous, biocompatible material and infiltrant.
57. The biologically active composite of claim 56 wherein the infiltrant comprises bone marrow aspirate.
58. The biologically active composite of claim 56 wherein the infiltrant comprises venous blood.
59. The biologically active composite of claim 56 wherein the infiltrant comprises thrombin.
60. The biologically active composite of claim 56 wherein the porous material has pores with a diameter up to about 100 μm .
61. The biologically active composite of claim 56 wherein the porous, biocompatible material has a pore volume of at least about 70%.
62. The biologically active composite of claim 56 wherein the porous, biocompatible material has a pore volume preferably of at least about 85%.
63. The biologically active composite of claim 56 wherein the porous material has a pore volume preferably of at least about 88%.
64. The biologically active composite of claim 63 wherein the porous material has a pore volume more preferably of at least about 90%.
65. The biologically active composite of claim 56 wherein the porous material comprises a synthetic bone mineral.
66. The biologically active composite of claim 56 wherein the porous material comprises a

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ceramic material.

67. The biologically active composite of claim 56 wherein the porous material comprises a calcium phosphate material.
68. The biologically active composite of claim 56 wherein the porous material comprises tri-calcium phosphate material.
69. The biologically active composite of claim 68 wherein the tri-calcium phosphate material is resorbable beta-tri-calcium phosphate.
70. The biologically active composite of claim 56 wherein the at least one porous, biocompatible material is comprised of a resorbable beta-tri-calcium phosphate with interconnected micro-, meso- and macro-pores that render said at least one porous, biocompatible material at least about 90% porous.
71. The biologically active composite of claim 56 wherein the infiltrant comprises proteins, cells, a medicament, antibiotic, growth factor, or growth hormone that would elicit bone formation or reparation.
72. A kit for preparation and delivery of biologically active composites comprising:
- an instrument for the injection and the withdrawal of one or more fluids; and
 - a porous, biocompatible material.
73. The kit of claim 72 wherein the instrument for said injection and said withdrawal of said fluids is a syringe.
74. The kit of claim 72 further comprising a second syringe.
75. The kit of claim 72 wherein a pre-evacuated tube is the instrument for said withdrawal of said fluids.
76. The kit of claim 72 wherein the porous, biocompatible material is comprised of a resorbable beta-tri-calcium phosphate with interconnected micro-, meso- and macro-

pores that render said at least one porous, biocompatible material at least about 90% porous.

77. The kit of claim 72 wherein said porous, biocompatible material is in morsel form.

78. The kit of claim 72 wherein said porous, biocompatible material is in block form.

79. The kit of claim 72 further comprising a cutting instrument.

80. The kit of claim 72 further comprising a spatula.

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